Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
)	
Incentive Auction of Upper Microwave)	AU Docket No. 19-59
Flexible Use Service Licenses in the Upper)	
37 GHz, 39 GHz, and 47 GHz Bands for)	
Next-Generation Wireless Services)	
)	
Comment Sought on Competitive Bidding)	
Procedures for Auction 103)	

REPLY COMMENTS OF T-MOBILE USA, INC.

T-Mobile USA, Inc. ("T-Mobile")^{1/} submits these reply comments in response to the comments filed on the *Public Notice* in the above-referenced proceeding proposing procedures for the incentive auction of the Upper 37 GHz (37.6-38.6 GHz), 39 GHz (38.6-40 GHz), and 47 GHz (47.2-48.2 GHz) bands ("Auction 103").^{2/}

- I. COMMENTERS AGREE THAT THE COMMISSION SHOULD ADOPT PROPOSALS THAT WOULD PROVIDE GREATER CERTAINTY TO INCUMBENT LICENSEES AND ENSURE A SUCCESSFUL AUCTION
 - A. The Commission Should Treat The Upper 37 GHz Band and 39 GHz Band as a Single Product that is Separate from the 47 GHz Band

Verizon urges the Commission to modify the category name for the Upper 37 GHz and 39 GHz bands – currently designated as "Category M/N" – and use only a single category designation, for example Category M.^{3/} In contrast, PVT Networks, Inc. ("PVT") argues that the

T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

See Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37 GHz, 39 GHz, and 47 GHz Bands for Next-Generation Wireless Services; Comment Sought on Competitive Bidding Procedures for Auction 103, Public Notice, FCC 19-35 (rel. Apr. 15, 2019) ("Public Notice").

See Comments of Verizon, AU Docket No. 19-59, at 6 (filed May 15, 2019) ("Verizon Comments"). Verizon explains that, for purposes of Auction 103, the Commission considers the Upper

bands warrant separate treatment because the interference protection rights to which licensees in each band are entitled may be different, particularly for Partial Economic Area ("PEA") markets that overlap with and are adjacent to coordination zones.^{4/} The Wireless Internet Service Providers Association ("WISPA") likewise contends that each band has unique encumbrance and incumbency issues that result in different values for the bands.^{5/}

T-Mobile agrees with Verizon that the Upper 37 GHz and 39 GHz bands should be treated as a single product that is separate and distinct from the 47 GHz band. As T-Mobile explained, ^{6/} the Upper 37 GHz band and 39 GHz band together present a unique opportunity in the millimeter wave spectrum, and unencumbered blocks in the bands are largely interchangeable. It is more important that the Commission treat the Upper 37 GHz and 39 GHz bands *together* as a single product rather than focus on a particular nomenclature.

The Commission should reject the requests of PVT and WISPA to treat the Upper 37 GHz band and 39 GHz band as separate categories of spectrum. *First*, the Commission recently addressed the disparate interference protection rights of licensees in the Upper 37 GHz band by adopting limitations on federal use of the band. *Second*, to the extent incumbent 39 GHz licensees are concerned about retaining their particular spectrum holdings in the 39 GHz band,

³⁷ GHz and 39 GHz bands "fungible," but the proposed category name – with two different letters and a character – could create complications for existing clock auction software.

See Comments of PVT Networks, Inc., AU Docket No. 19-59, at 2-4 (filed May 15, 2019) ("PVT Comments") (adding that PVT did not have concerns with this approach until "the FCC's proposed incentive auction and 39 GHz rebanding procedures appeared to create the very real possibility that its incumbent 39 GHz license blocks could be 'reconfigured' into Upper 37 GHz Band spectrum").

See Comments of the Wireless Internet Service Providers Association, AU Docket No. 19-59, at 5-7 (filed May 15, 2019) ("WISPA Comments").

See Comments of T-Mobile USA, Inc., AU Docket No. 19-59, at 9 (filed May 15, 2019) ("T-Mobile Comments").

See Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, Fifth Report and Order, FCC 19-30 (rel. Apr. 15, 2019).

securing spectrum that may be subject to designation for future federal use, or obtaining spectrum near protected federal locations, they may, as PVT acknowledges, ^{8/} bid on specific channels during the assignment phase to retain their holdings and/or avoid that proximity.

While T-Mobile recognizes that incumbent 39 GHz licensees that choose not to bid on new licenses may nevertheless, as a result of reconfiguration, be assigned spectrum blocks in the Upper 37 GHz band post-reconfiguration that they find problematic, the Commission could address that concern without treating the Upper 37 and 39 GHz bands as separate products. Instead, the Commission could clarify *pre-auction* where in the band (*e.g.*, the upper end of the 39 GHz band) it intends to relocate incumbent 39 GHz licensees that accept modified licenses. This will provide incumbents the certainty they need to help inform their decisions both in bidding and in determining whether to accept modified licenses.

B. The Commission Has Appropriately Determined to Provide Incumbents with Incentive Payment Credits in Lieu of Lower Upfront Payments

Verizon contends that the Commission should modify the upfront payments required for Auction 103 to a quarter of the proposed amount for all applicants or, at a minimum, set a lower upfront payment amount for incumbent 39 GHz licensees. ^{9/} T-Mobile appreciates Verizon's concerns regarding upfront payments. It understands that, in many cases, incumbent licensees will merely attempt to re-secure spectrum rights that they already hold. However, auction participants may not wish to make that decision in advance of the auction. They may, for example, wish to bid on licenses with higher MHz-pop values than they currently hold. Or, they may wish to bid on more licenses in the same geographic area than they currently hold. There is

^{8/} See PVT Comments at 4-5.

See Verizon Comments at 2-3.

no mechanism for the Commission to allow incumbents to signal that determination, and doing so could be viewed as revealing bids or bidding strategies in violation of the Commission's rules.

For those incumbent licensees that may choose to seek licenses different than those they hold today, the reasons for retaining the proposed upfront payments remain valid. In particular, the Commission has explained, as T-Mobile observed, that upfront payments protect against frivolous or insincere bidding. ^{10/} Reducing upfront payments runs the risk that a party seeking to participate in the auction beyond simply re-acquiring spectrum rights will not have the financial capability to make the down or final payments necessary to obtain the license(s) it wins or, in the event it defaults, make any necessary default payment(s). ^{11/} This would not only harm incumbent 39 GHz licensees who were expecting an incentive payment, but would also undermine the safeguards (*i.e.*, default payments) the Commission put in place to ensure the integrity of the auction and service to the public. ^{12/}

The Commission has already adopted a better approach by providing incumbent 39 GHz licensees with credits for relinquishing their spectrum usage rights that they can use to offset their post-auction payment obligations. Not only would this approach reduce the overall financial burden on incumbent 39 GHz licenses, but it would also preserve the Commission's ability to use upfront payments as a means to ensure that bidders are financially capable and

See T-Mobile Comments at 9 n.23; *Public Notice* ¶ 51.

See Public Notice ¶ 56.

See id. \P 98 (explaining that "defaults weaken the integrity of the auction process and may impede the deployment of service to the public").

See Notice of Updated 39 GHz Reconfiguration Procedures; Preparation for Incentive Auction of Upper Microwave Flexible Use Service Licenses in the 37 GHz, 39 GHz, and 47 GHz Bands (Auction 103); Order of Modification, Public Notice, DA 19-397, ¶ 53 (rel. May 14, 2019) ("Updated 39 GHz Reconfiguration Procedures Public Notice") (explaining that the Commission will "calculate obligations toward winning bids net of any incentive payment for relinquished holdings").

sincerely interested in bidding in the auction. Moreover, the Commission already rejected Verizon's request that the Commission credit participating incumbent licensees' upfront payments based on licenses that they agree to relinquish. Verizon's current request is simply a reformulation of what it previously asked and the Commission declined.

The issue that Verizon raises – submitting upfront payments that may ultimately be returned because of incentive payment credits – has the greatest impact on entities that can best address it. Verizon, AT&T, and their affiliates hold the greatest number of incumbent licenses in the 39 GHz band and are most financially capable of waiting until the end of the auction to receive their incentive payment credits.^{15/}

C. The Assignment Phase Should Include Only Feasible Options and Should Occur Regardless of the Net Revenue Requirement in the Clock Phase

AT&T suggests that the Commission should present assignment round bidders only with options that are *feasible – i.e.*, assignment options that actually exist for those bidders – rather than present *all* "bidding options," ¹⁶ an approach the Commission took in Auctions 1002 (600 MHz) and 102 (24 GHz). AT&T explains that, contrary to the Commission's assertion, limiting an assignment-phase bidder's bidding options would not permit that bidder to infer the clockphase winnings of other bidders. ¹⁷ In addition, AT&T asserts that Auction 103, unlike Auction 1002, will include potentially 24 different license blocks, significantly increasing the number of

Public Notice \P 56; see also Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, Fourth Report and Order, 33 FCC Rcd 12168, \P 51 (2018) ("2018 Spectrum Frontiers Order").

See Updated 39 GHz Reconfiguration Procedures Public Notice at Appendix B (demonstrating that AT&T and its affiliates hold more than 350 39 GHz licenses and that Verizon and its affiliates hold more than 400 39 GHz licenses).

See Comments of AT&T Inc., AU Docket No. 19-59, at 1-2 (filed May 15, 2019) ("AT&T Comments").

^{17/} *See id.* at 3.

potential assignments a bidder has if the choices are unconstrained by other bidders and feasibility. 18/

T-Mobile agrees. Because of the potential for 24 different license blocks, the opportunity for, and ability of, an assignment-phase bidder to infer the clock-phase winnings of other bidders will be limited. Moreover, the number of possible assignments and choices for bidders may be massive if both feasible and infeasible options are presented. As T-Mobile and others explained in Auction 1002, assignment-phase bidding "requires the bidders to form specific valuations for the different assignments within each PEA, which is difficult and time-consuming." Including infeasible assignment options will only exacerbate the challenges associated with evaluating assignments and create confusion.

T-Mobile also agrees with Verizon that the Commission should hold an assignment round even if the clock-phase revenues do not meet the net revenue requirement. As Verizon points out, the clock phase could fall short of the net revenue requirement by only a small amount.^{21/} In that case, the assignment-phase revenues could generate the additional amount needed to meet

^{18/} *See id.* at 3-4.

The 600 MHz assignment round had seven blocks, while the 24 GHz auction had a maximum of five blocks within the same category. See id. at 3; Clearing Target of 84 Megahertz Set for Stage 4 of the Broadcast Television Spectrum Incentive Auction; Stage 4 Bidding in the Reverse Auction will Start on December 13, 2016, Public Notice, 31 FCC Rcd 12846, ¶ 3 (2016); Auctions of Upper Microwave Flexible Use Licenses for Next-Generation Wireless Services et al., Public Notice, 33 FCC Rcd 7575, ¶ 217 (2018). While it might have been possible to deduce who won each block in those auctions, the complexity of guessing, and the likelihood of guessing wrong, increases exponentially as the number of blocks available increases.

See Letter from Trey Hanbury, Hogan Lovells US LLP, Counsel to T-Mobile USA, Inc., to Ms. Marlene H. Dortch, Secretary, FCC, GN Docket No. 12-268 and AU Docket No. 14-252, at 3 (filed June 16, 2015) (reporting on *ex parte* meetings between T-Mobile, United States Cellular Corp., and members of the Commission's Incentive Auction Task Force).

See Verizon Comments at 5.

the net revenue requirement.^{22/} T-Mobile agrees that allowing assignment-round payments to push net revenues over the required threshold, and thus allowing the auction to close, would be administratively efficient because the additional time required by an assignment round "pales in comparison to the time that would be spent on subsequent proceedings to reconfigure the 39 GHz band."^{23/} Indeed, this approach is similar to the Commission's use of an "extended round" in Auction 1002 as a means to "increase the likelihood that the auction will conclude" and thereby avoid the need to restart the auction process with potentially less spectrum.^{24/}

II. THE COMMISSION SHOULD REJECT PROPOSALS THAT WOULD COMPLICATE OR DELAY THE AUCTION AND PROPOSALS THAT HAVE ALREADY BEEN ADDRESSED AND DISMISSED

A. The Commission Should Not Include "White Spaces" in Auction 103

California Internet, L.P. DBA GeoLinks ("GeoLinks") asserts that if "white spaces" in the 39 GHz band exist, the Commission should make them available in Auction 103 to allow smaller carriers to provide more pinpointed services to specific communities without having to try and compete with larger providers for an entire PEA.²⁵/ WISPA similarly claims that because smaller providers are unable to compete on a PEA-basis, the Commission should auction the

See id. The assignment phase for Auction 102, for example, raised approximately \$36 million in gross bids. See News Release, Clock Phase of Auction 102 Concludes, FCC (Apr. 17, 2019), https://docs.fcc.gov/public/attachments/DOC-357064A1.pdf (announcing that the gross proceeds in the clock phase of Auction 102 reached just over \$1.988 billion); News Release, FCC Concludes First High-Band 5G Airwaves Auctions, FCC (May 28, 2019), https://docs.fcc.gov/public/attachments/DOC-357702A1.pdf (announcing that approximately \$2.024 billion (in gross bids) was raised in Auction 102 after the assignment phase).

Verizon Comments at 5.

See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, Report and Order, 29 FCC Rcd 6567, ¶ 512 (2014).

See Comments of California Internet, L.P. DBA GeoLinks, AU Docket No. 19-59, at 2-3 (filed May 15, 2019) ("GeoLinks Comments").

"white space" where an incumbent in the 39 GHz band decides to retain its partial PEA holding so that smaller carriers can participate.^{26/}

The Commission should reject these requests. As T-Mobile observed and others agree, ^{27/} participation in Auction 103 will be a complicated process – the potential number of products available in Auction 103 will be large, and some participants (*i.e.*, incumbent 39 GHz licensees) will be required to evaluate their needs and interests in new licenses against relinquishing their spectrum usage rights. Adding "white spaces" would only further complicate the process and likely delay the auction. Indeed, the current clock auction structure presumes licenses are fungible, but auctioning "white space" licenses will mean that some licenses will *not* be fungible.

In addition, including "white spaces" in Auction 103 would offer limited, if any, benefits. The Commission's reconfiguration procedures for the 39 GHz band will seek to reduce the amount of "white spaces" in the first instance.^{28/} And the Commission specifically adopted rounding thresholds so that if an incumbent's reconfigured holdings would leave only a *de minimis* percentage (*i.e.*, 10 percent) of a whole new license unassigned, "the holdings would be rounded up and a modified license based on the holdings would be equivalent to a whole new license, leaving no white space." Thus, if reconfiguration of the 39 GHz band results in "white spaces," those "white spaces" will likely be limited in number. Creating a process for those

See WISPA Comments at 2-4.

See T-Mobile Comments at 12; AT&T Comments at 3-4; Verizon Comments at 3.

See Notice of Initial 39 GHz Reconfiguration Procedures et al., Public Notice, DA 19-196, ¶ 38 (rel. Mar. 20, 2019) ("Initial 39 GHz Reconfiguration Procedures Public Notice") (explaining that the Commission will minimize "white spaces" by "propos[ing] the reconfiguration that assigns any modified license for a partial PEA in the PEA with the fewest remaining unassigned weighted MHz-pops"); Updated 39 GHz Reconfiguration Procedures Public Notice ¶ 18.

Initial 39 GHz Reconfiguration Procedures Public Notice ¶ 38 n.54; see also Updated 39 GHz Reconfiguration Procedures Public Notice ¶ 22.

limited authorizations is not an efficient use of Commission resources, and there is no reason to think that any "white spaces" that become available would suit any entity's business needs or service plans – including those of GeoLinks or WISPA's members. In any case, the Commission may address the dissemination of that spectrum, including via auction, at a later date when the post-auction landscape is clearer – it need not complicate or delay Auction 103 now.

B. The Commission Should Reject Requests to Utilize Smaller License Areas

The Rural Wireless Association ("RWA") asserts that "high-band spectrum intended for commercial use should be licensed using smaller geographic areas, such as counties or even census block groups." WISPA likewise complains that smaller providers may be unable to compete for licenses that cover an entire PEA.^{31/}

The Commission should dismiss both RWA's request and WISPA's complaints. The Commission already decided to license spectrum in Auction 103 on a PEA-basis in its 2016 Spectrum Frontiers Order and 2017 Spectrum Frontiers Order.^{32/} Any objection RWA or WISPA had to the Commission's decisions should have been raised, as others note, in petitions for reconsideration of those decisions.^{33/} But neither party made such a request. The Commission should not allow RWA or WISPA to raise now-untimely arguments.

Comments of the Rural Wireless Association, Inc., AU Docket No. 19-59, at 1 (filed May 15, 2019) ("RWA Comments").

See WISPA Comments at 2-3;

See Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, et al., Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014, ¶¶ 82, 121 (2016) ("2016 Spectrum Frontiers Order"); Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, et al., Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order, 32 FCC Rcd 10988, ¶ 50 (2017) ("2017 Spectrum Frontiers Oder").

See, e.g., Letter from Jennifer A. Manner, Senior Vice President, Regulatory Affairs, and Brennan Price, Senior Principle Engineer, Regulatory Affairs, Hughes Network Systems, LLC, to Ms. Marlene H. Dortch, Secretary, FCC, AU Docket No. 19-59, at 1 (filed May 24, 2019) ("The proper timing for RWA to raise its concerns was in a timely filed petition for reconsideration to the Spectrum Frontier Report & Order, not in comments to a docket developing auction procedures for this band.").

III. CONCLUSION

T-Mobile applauds the Commission for continuing the process of auctioning the Upper 37 GHz, 39 GHz, and 47 GHz bands. T-Mobile joins other commenters in urging the Commission to adopt sensible proposals that will ensure a successful auction, including using separate categories for the Upper 37 GHz and 39 GHz bands, providing incumbents with credits to offset their payment obligations, and allowing the assignment round to satisfy the clock phase net revenue requirement. The Commission, however, should reject proposals that threaten to undermine the auction such as including "white spaces" and allowing untimely requests to change the geographic areas of the licenses.

Respectfully submitted,

/s/ Steve B. Sharkey
Steve B. Sharkey
John Hunter
Christopher Wieczorek

T-MOBILE USA, INC. 601 Pennsylvania Avenue, N.W. Suite 800 Washington, DC 20004 (202) 654-5900

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